

LABORATORY NO: 98040

DATE: August 13, 1986

940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

PO Box 3546

Seattle, WA 98124

ATTN: Jim Brown

PO# A 9352

REPORT ON: WATER

SAMPLE

Zinc

Chromium

Copper

Nickel

IDENTIFICATION: Submitted 8/1/86 and identified as shown below:

Metro Waste Discharge #3200 - A9352

TESTS PERFORMED AND RESULTS:

parts	per million (mg/L)	
	0.10	
	0.75	
	0.20	

0.42

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

Testing Laboratories, Inc. 940 South Harney St., Seattle, Washington 98108 (206)767-5060



Certificate

Chemistry Microbiology and Technical Services

CLIENT

Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124

ATTN: Jim Brown

REPORT ON ACID LABORATORY NO.

98039

DATE

Aug. 21, 1986

P0#

A 9353

SAMPLE IDENTIFICATION Submitted 8/01/86 and identified as shown below:

Nitric Acid Sample I.D. # 3200-A9353

TESTS PERFORMED AND RESULTS:

Specific Gravity, at 25°C ---

1.221

Total Acidity, calculated as % HN03 (methyl orange end point) -

7.5

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO: lai





98828

Sept. 19, 1986

A-9698

LABORATORY NO.

DATE

P0#

940 South Harney St., Seattle. Washington 98108 (206)767-5060

Chemistry Microbiology, and Technical Services

CLIENT

Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124

ATTN:

Jim Brown

REPORT ON

ACID

SAMPLE IDENTIFICATION Submitted 9/16/86 and identified as shown below:

Nitric Acid Sample ID# 3200-A9698

AND RESULTS:

Specific Gravity, at 25°C ----

1.218

Total Acidity, calculated as % HN03 (methyl orange end point) ---

7.2

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO: laj



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98831

Oct. 3, 1986

A-9697

Certificate

LABORATORY NO.

DATE

PØ#

940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry Microbiology, and Technical Services

CLIENT

Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124

ATTN: Jim Brown

REPORT ON

WASTE WATER

SAMPLE IDENTIFICATION Submitted 9/16/86 and identified as shown below:

Metro Waste Discharge Sample ID# 3200-A9697

TESTS PERFORMED AND RESULTS:

parts/per million (mg/L)

Zinc ----- 0.10 Chromium ----- 3.0 Copper ---- 0.48 Nickel ----- 1.2

Respectfully submitted, .

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO: laj





940 South Harney St., Seattle. Washington 98108 (206)767-5060

Chemistry Microbiology, and Technical Services

CLIENT:

Alaskan Copper Works

PO Box 3546

Seattle, WA 98124

ATTN: Jim Brown

LABORATORY NO: 99116

DATE: Oct. 13, 1986

PO# A9835

REPORT ON: WASTE WATER

SAMPLE

IDENTIFICATION:

Submitted 10/3/86 and identified as shown below:

Metro Waste Discharge ID #3200-A-9835

TESTS PERFORMED AND RESULTS:

parts per milliøn (mg/L)

Zinc

Chromium

Copper

Nickel

0.17

0.85

0.59

0.27

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO:dr





LABORATORY NO.

DATE

P0#

99117

Oct. 9, 1986

A-9836

940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry Microbiology and Technical Services

CLIENT

Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124

AIIN:

ATTN: Jim Brown

REPORT ON

NITRIC ACID

SAMPLE IDENTIFICATION

Submitted 10/03/86 and identified as shown below:

Nitric Acid Sample ID# 3200-A9836

TESTS PERFORMED AND RESULTS:

Specific Gravity, at 25°C -----

1.246

Total Acidity, calculated as %

HNO3 (methyl orange end point) -----

7.5

Respectfully submitted,

Laucks Testing Laboratories, Inc.

M. Owens

JMO: laj





940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry Microbiology and Technical Services

CLIENT:

Alaskan Copper Works

PO Box 3546

Seattle, WA 98124

ATTN: Jim Brown

LABORATORY NO: 99638

DATE: Nov. 12, 1986

PO# M-1079

REPORT ON: NITRIC ACID

SAMPLE

IDENTIFICATION:

Submitted 11/3/86 and identified as shown below:

Nitric Acid Sample ID# 3200-M-1079

TESTS PERFORMED AND RESULTS:

Specific Gravity @ 25 degrees C

1.274

Total Acidity, calculated as % HNO3 (methyl orange end point)

8.6

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO:dr





940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

PO Box 3546

Seattle, WA 98124

ATTN: Jim Brown

LABORATORY NO: 99639

DATE: Nov. 12, 1986

PO# M-1080

REPORT ON: WASTE DISCHARGE

SAMPLE

IDENTIFICATION: Submitted 11/3/86 and identified as shown below:

Metro Waste Discharge ID# 3200 Ml080

TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

 Zinc
 0.086

 Chromium
 1.7

 Copper
 0.44

 Nickel
 1.3

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:dr





940 South Harney St., Seattle. Washington 98108 (206)767-5060

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

PO Box 3546

Seattle, WA 98124

ATTN: Jim Brown

LABORATORY NO: 99527

DATE: Nov. 12, 1986

PO# M-1039

REPORT ON: LIQUID

SAMPLE

IDENTIFICATION: Submitted 10/27/86 and identified as shown below:

Metro grab sample 10/23/86 ID# 3200-M-1039 86/10/23 @ 13:45

TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

 Zinc
 0.062

 Chromium
 1.5

 Copper
 0.46

 Nickel
 0.91

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:dr



Testing Laboratories, Inc. 940 South Harney St., Seattle, Washington 98108 (206)767-5060



Certificate

Alaskan Copper Works CLIENT:

P.O. Box 3546 Seattle, WA 98124 ATTN: Jim Brown

LABORATORY NO. 99932

DATE: Dec. 6, 1986

PO# M-1224

REPORT ON:

TRANSFORMER OIL

SAMPLE

IDENTIFICATION:

Submitted 11/19/86 and identified as shown below;

ID# 628-Ml224 Transformer - Waste Oil

TESTS PERFORMED AND RESULTS:

parts per million (mg/kg) 6. B PCB -Key B = Arochlor 1254

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO:laj







Certificate

Chemistry Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

P.O. Box 3546 Seattle, WA 98124 ATTN: Jim Brown LABORATORY NO. 99932

DATE: Dec. 6, 1986

PO# M-1224

REPORT ON:

TRANSFORMER OIL

SAMPLE

IDENTIFICATION:

Submitted 11/19/86 and identified as shown below:

ID# 628-M1224 Transformer - Waste Oil

TESTS PERFORMED AND RESULTS:

parts per million (mg/kg)

PCB

6. B

Key

B = Arochlor 1254

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO:laj

. M. Owens



Certificate

940 South Harney St., Seattle, Washington 98108 (206)767-5060

Chemistry Microbiology and Technical Services

CLIENT:

Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124 ATTN: Jim Brown LABORATORY NO. 1092

DATE: Dec. 6, 1986

REPORT ON:

NITRIC ACID

SAMPLE

IDENTIFICATION:

Submitted 12/02/86 and identified as shown below:

1) 3200 M1306

2) 3600 ML306

TESTS PERFORMED AND RESULTS:

	1	2
Specific Gravity at 25 degrees C	1.110	1.240
Total Acidity, calculated as % HN03 (methyl orange end point)	6.8	5.5

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO:laj





LABORATORY NO. 1090

DATE: Dec. 13, 1986

PO# 1304

940 South Harney St., Seattle. Washington 98108 (206)767-5060

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

P.O. Box 3546 Seattle, WA 98124

ATTN: Jim Brown

REPORT ON:

WASTE WATER

SAMPLE

IDENTIFICATION:

Submitted 12/02/86 and identified as shown below:

3600 - M1304

TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Chromium	0.18
Copper	0.070
Nickel	0.12
Zinc	0.21

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO: laj







Chemistry Microbiology, and Technical Services

CLIENT: Alaskan Copper Works

P.O. Box 3546

Seattle, WA 98124

ATTN: Jim Brown

LABORATORY NO. 1091

DATE: Dec. 13, 1986

PO# 1305

REPORT ON:

WASTE WATER

SAMPLE

IDENTIFICATION:

Submitted 12/02/86 and identified as shown below:

3200 - M1305

TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Chromium -2.4 0.95 Copper -Nickel -1.6 Zinc -0.26

Respectfully submitted,

Laucks Testing Laboratories, Inc.

JMO: laj

